

REMARKS

Claims 1-40 are currently pending. Claims 1-40 are rejected. Claims 1-5, 7-13, 19, 25, 26, 27, 33 39, and 40 have been amended. Claims 6 and 18 have been cancelled. No new matter has been added. Any rejection with new art should be a non-final rejection.

Specification Amendment

Applicant would like to thank the Examiner for pointing out the requirements for the Abstract. The Abstract has been amended as requested by the Examiner.

Claim Amendments

Claims 1, 13, 25 and 26 were amended to clarify that the service abstractions are associated with a user of the communication network. Claims 2-5, 7-12, 19, 27, 33, 39, and 40 were amended to fix the numbering of steps in the claims and other informalities. Claims 6 and 18 have been canceled as their subject matter has been incorporated into claims 1 and 13 respectively.

Claim Objections

Applicants would like to thank the Examiner for pointing out the informalities in claims 7, 19, 39, and 40. The claims have been amended to address the informalities.

Claim Rejections Under 35 U.S.C. § 102

Claims 1-3, and 5-6 are rejected under 35 U.S.C. § 102(e) as being anticipated by 2003/0021283 to See et al. (hereinafter "See"). Applicants respectfully traverse the rejection.

Claim 1 is independent and claims 2, 3, 5, and 6 depend from claim 1. Claim 1 has been amended to incorporate the subject matter of claim 6. As claims 2, 3, and 5 depend from amended claim 1, they incorporate each and every element of amended claim 1. Claim 6 has been cancelled.

Summary of See (U.S. Pub. No. 2003/0021283)

See is directed to a distributed network management system that utilizes policy rules in rendering management decisions. The system includes a policy console that populates and manages network policies in a policy repository. Various network devices coupled to the policy repository download policy rules relevant to the devices for managing network elements associated with each network device. Each network device includes a policy decision module for rendering management decisions for its network elements based on the retrieved network policies. Each network device further includes a policy enforcement module for enforcing the management decisions and controlling the associated network elements based on the policies.

See fails to disclose each and every element of claims 1-3 and 5. Specifically See fails to disclose associating one or more of the service abstractions with a user of the communications network.

The present invention as set forth in amended claim 1 controls usage of the network resource based on the user of the network system. This is not a concept disclosed in See. The ability to control use based on the user provides a level of flexibility not considered by See. See only considers managing based on the device or element. In contrast, the present invention controls based on a user *regardless of device or element being used by the user*. The Examiner appears to be equating a user as disclosed in the present invention with a host computer disclosed in See. A user is not the same as a host computer. A host computer is a device. Users operate devices. See discloses associating policies with a device. See does not disclose associating a service abstraction with a user who could be operating any number of possible devices. As such, See fails to *disclose* each and every element of claims 1-3 and 5.

In view of the above amendments and arguments, Applicants respectfully request that the rejection to claims 1-3, and 5 under 35 U.S.C. 102(e) be removed and the claims passed to allowance.

Claim Rejections Under 35 U.S.C. § 103

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over See in view of Nessett (5,968,176). Claims 7-9, 11-12, 27-29 and 31-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over See in view of Azarmi (5,905,715). Claims 10 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over See in view of Azarmi and further in view of Nessett. Claims 13-18 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over See in view of Nessett. Claims 19-24 and 33-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over See in view of Nessett and further in view of Azarmi. Claim 26 is rejected under 35 U.S.C. 103(a) as being patentable over See. Applicants respectfully traverse the rejection.

Summary of Nessett (U.S. Patent No. 5,968,176)

Nessett is directed to a system that provides for establishing security in a network that include nodes having security functions operating in multiple protocol layers. Multiple network devices, such as remote access equipment, routers, switches, repeaters and network cards having security functions are configured to contribute to implementation of distributed firewall functions in the network. By distributing firewall functionality throughout many layers of the network in a variety of network devices, a pervasive firewall is implemented. The pervasive, multilayer firewall includes a policy definition component that accepts policy data that defines how the firewall should behave. The policy definition component can be a centralized component, or a component that is distributed over the network. The multilayer firewall also includes a collection of network devices that are used to enforce the defined policy. The security functions operating in this collection of network devices across multiple protocol layers are coordinated by the policy definition component so that particular devices enforce that part of the policy pertinent to their part of the network.

Summary of Azarmi (U.S. Patent No. 5,905,715)

Azarmi is directed to a network management system for a communications network including management function software accessible to one or more workstations and incorporating a data store for management information. The network management system is structured to accommodate a layered model of the network and pays particular attention to the

Service Management Layer/Network Management Layer interface. In fault and test management, the network management system incorporates elements to apply constraints, feature agreements, which elements then determine diagnosis and reporting procedures in response to fault or performance report or test inputs to the system. The system can be used to manage specific services, such as flexible bandwidth services, carried by selected network technology, such as Asynchronous Transfer Mode switching.

Claim 4

The combination of See with Nessett fails to teach or suggest each and every element of claim 4. Claim 4 depends indirectly from amended claim 1 and as such incorporates each and every element of amended claim 1. For the same reasons as set forth above in regard to the 35 U.S.C. 102 rejection, See fails to teach or suggest every element of claim 4. Specifically, See fails to teach or suggest associating one or more of the service abstractions with a user of the communications network.

As discussed above the present invention controls usage of the network resource based on the user of the network system. This is not a concept disclosed in See. The ability to control use based on the user provides a level of flexibility not considered by See. See only considers managing based on the device or element. In contrast, the present invention controls based on a user *regardless of device or element being used by the user*. The Examiner appears to be equating a user as disclosed in the present invention with a host computer disclosed in See. A user is not the same as a host computer. A host computer is a device. Users operate devices. See discloses associating policies with a device. See does not disclose associating a service abstraction with a user who could be operating any number of possible devices. The addition of Nessett fails to cure this deficiency. As such, the combination See with Nessett fails to *teach or suggest* each and every element of claim 4.

In view of the above arguments, Applicants submit that the subject matter of claim 4 is not obvious and respectfully request that the rejection to the claim under 35 U.S.C. 103 be removed and the claim passed to allowance.

Claims 7-9 and 11-12

The combination of See with Azarmi fails to teach or suggest each and every element of claims 7-9 and 11-12. Claims 7-9 and 11-12 depend indirectly from amended claim 1 and as such incorporate each and every element of amended claim 1. For the same reasons as set forth above in regard to the 35 U.S.C. 102 rejection, See fails to teach or suggest every element of claims 7-9 and 11-12. Specifically, See fails to teach or suggest associating one or more of the service abstractions with a user of the communications network.

As discussed above the present invention controls usage of the network resource based on the user of the network system. This is not a concept disclosed in See. The ability to control use based on the user provides a level of flexibility not considered by See. See only considers managing based on the device or element. In contrast, the present invention controls based on a user *regardless of device or element being used by the user*. The Examiner appears to be equating a user as disclosed in the present invention with a host computer disclosed in See. A user is not the same as a host computer. A host computer is a device. Users operate devices. See discloses associating policies with a device. See does not disclose associating a service abstraction with a user who could be operating any number of possible devices. The addition of Azarmi fails to cure this deficiency. As such, the combination See with Azarmi fails to *teach or suggest* each and every element of claims 7-9 and 11-12.

In view of the above arguments, Applicants submit that the subject matter of claims 7-9 and 11-12 is not obvious and respectfully request that the rejection to the claims under 35 U.S.C. 103 be removed and the claims passed to allowance.

Claims 27-29 and 31-32

Of these claims, claim 27 is independent. Claims 28-29 and 31-32 depend from claim 27 and as such incorporate each and every element of claim 27. The combination of See with Azarmi fails to teach or suggest each and every element of claims 27-29 and 31-32. Specifically, the combination of See and Azarmi fails to teach or suggest creating one or more role abstractions wherein each role abstraction represents a role of a user with respect to the communication network.

The present invention, as set forth in claims 27-29 and 31-32 is directed to controlling use of network resources based on the user of the communication networks. In the specific case of claims 27-29 and 31-32 there is a focus on the role of the user in the communication network. That is the role of the user affect the use of the communication network the user is granted. For example, if the communication network was a university network, the role of a user may be as an undergraduate student, a graduate student, a professor, staff, or a system administrator. Each of these roles may be provided with a different level of usage on the network. As such the role of the user is represented by a role abstraction including a set of one or more packet rules. This is a concept that is not suggested or taught in either See or Azarmi. As such, the combination See with Azarmi fails to *teach or suggest* each and every element of claims 27-29 and 31-32.

In view of the above arguments, Applicants submit that the subject matter of claims 27-29 and 31-32 is not obvious and respectfully request that the rejection to the claims under 35 U.S.C. 103 be removed and the claims passed to allowance.

Claims 10 and 30

The combination of See with Azarmi and Nessett fails to teach or suggest each and every element of claims 10 and 30. Claims 10 and 30 depend from claims 8 and 28 which in turn depend from claims 1 and 27, respectively, and as such incorporate each and every element of their respective claims from which they depend.

As discussed above with regard to claims 7-9, 11-2, 27-29 and 31-32, the combination of See and Azarmi fails to teach or suggest each and every element of claims 1 and 27 from which claims 10 and 30 depend. Thus the combination of See and Azarmi fail to teach each and every element of claims 10 and 30. The addition of Nessett fails to cure this deficiency. As such, the combination of See, Nessett, and Azarmi fails to teach or suggest each and every element of claims 10 and 30.

In view of the above arguments, Applicants submit that the subject matter of claims 10 and 30 is not obvious and respectfully request that the rejection to the claims under 35 U.S.C. 103 be removed and the claims passed to allowance.

Claims 13-18 and 25

Claims 13 and 25 are independent. Claims 14-18 depend from claim 13. Claims 13 and 25 have been amended to the subject matter of claim 18, namely that the one or more service abstractions are associated with a user of the communication network. As claims 14-17 depend from amended claim 13, they incorporate each and every element of amended claim 13. Claim 18 has been cancelled.

The combination of See and Nessett fails to teach or suggest each and every element of claims 13-17 and 25. Specifically, See and Nessett fail to teach or suggest creating one or more service abstractions wherein the one or more service abstractions are associated with a user of the communication network.

As discussed above the present invention controls usage of the network resource based on the user of the network system. This is not a concept disclosed in See. The ability to control use based on the user provides a level of flexibility not considered by See. See only considers managing based on the device or element. In contrast, the present invention controls based on a user *regardless of device or element being used by the user*. The Examiner appears to be equating a user as disclosed in the present invention with a host computer disclosed in See. A user is not the same as a host computer. A host computer is a device. Users operate devices. See discloses associating policies with a device. See does not disclose associating a service abstraction with a user who could be operating any number of possible devices. The addition of Nessett fails to cure this deficiency. As such, the combination See with Nessett fails to *teach or suggest* each and every element of claim 13-17 and 25.

In view of the above arguments, Applicants submit that the subject matter of claims 13-17 and 25 is not obvious and respectfully request that the rejection to the claims under 35 U.S.C. 103 be removed and the claim passed to allowance.

Claims 19-24

The combination of See with Nessett and Azarmi fails to teach or suggest each and every element of claims 19-24. Specifically the combination of references fails to teach or suggest creating one or more service abstractions wherein the one or more service abstractions are

associated with a user of the communication network as well as role abstractions representing a role of a user with respect to the communication network wherein each role abstraction includes a set of one or more service abstractions.

Claims 19-24 depend from claim 13 and as such incorporate each and every element of claim 13. As discussed above in regard to claim 13, the combination of See and Nessett does not disclose associating a service abstraction with a user who could be operating any number of possible devices. The addition of Azarmi does not cure this deficiency. Likewise, as set forth in regard to claim 7-9 above, the combination of See with Azarmi fails to teach or suggest role abstractions representing a role of a user with respect to the communication network. The addition of Nessett fails to cure this deficiency. As such the combination of See with Nessett and Azarmi fails to teach or suggest each and every element of claims 19-24.

In view of the above arguments, Applicants submit that the subject matter of claims 19-24 is not obvious and respectfully request that the rejection to the claims under 35 U.S.C. 103 be removed and the claim passed to allowance.

Claims 33-40

Of these claims, claims 33, 39 and 40 are independent. Claims 34-38 depend from claim 33 and as such incorporate each and every element of claim 33. As discussed above, in regard to claims 27-29 and 31-32, the combination of See with Azarmi fails to teach or suggest each and every element of claims 27-29 and 31-32. Specifically, the combination of See and Azarmi fails to teach or suggest creating one or more role abstractions wherein each role abstraction represents a role of a user with respect to the communication network.

The present invention, as set forth in claims 33-40 is directed to controlling use of network resources based on the user of the communication networks. In the specific case of claims 33-40 there is a focus on the role of the user in the communication network. That is the role of the user affect the use of the communication network the user is granted. For example, if the communication network was a university network, the role of a user may be as an undergraduate student, a graduate student, a professor, staff, or a system administrator. Each of these roles may be provided with a different level of usage on the network. As such the role of

the user is represented by a role abstraction including a set of one or more packet rules. This is a concept that is not suggested or taught in either See or Azarmi. The addition of Nessett fails to cure this deficiency. As such, the combination See with Nessett and Azarmi fails to *teach or suggest* each and every element of claims 33-40.

In view of the above arguments, Applicants submit that the subject matter of claims 33-40 is not obvious and respectfully request that the rejection to the claims under 35 U.S.C. 103 be removed and the claims passed to allowance.

Claim 26

See fails to disclose each and every element of amended claim 26. For the same reasons as set forth above in regard to the 35 U.S.C. 102 rejection, See fails to teach or suggest every element of amended claim 26. Specifically, See fails to teach or suggest creating one or more service abstractions associated with a user of the communications network.

As discussed above the present invention controls usage of the network resource based on the user of the network system. This is not a concept discussed in See. The ability to control use based on the user provides a level of flexibility not considered by See. See only considers managing based on the device or element. In contrast, the present invention controls based on a user *regardless of device or element being used by the user*. See discloses associating policies with a device. See does not disclose associating a service abstraction with a user who could be operating any number of possible devices. As such, the See fails to *teach or suggest* each and every element of claim 26.

In view of the above amendments and arguments, Applicants submit that the subject matter of claim 26 is not obvious and respectfully request that the rejection to the claim under 35 U.S.C. 103 be removed and the claim passed to allowance.


CONCLUSION

In view of the above amendment, applicant believes the pending application is in condition for allowance.

Applicant believes no fee is due with this statement. However, if a fee is due, please charge our Deposit Account No. 12-0080, under Order No. ENB-012 from which the undersigned is authorized to draw.

Dated: April 13, 2006

Respectfully submitted,

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